

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number  
**WO 2004/052274 A2**

- (51) International Patent Classification<sup>7</sup>: **A61K**
- (21) International Application Number:  
PCT/IL2003/001041
- (22) International Filing Date: 9 December 2003 (09.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/431,723 9 December 2002 (09.12.2002) US
- (71) Applicant (for all designated States except US): **PHAGE BIOPHARM LLC** [US/US]; c/o A. Rubin, 3300 NE 191st Street., Suite #2018, Aventura, FL 33180 (US).
- (72) Inventor; and  
(75) Inventor/Applicant (for US only): **BUJANOVER, Sergey** [IL/IL]; 242/31 Nofekh Street, Gilo, Jesuralem 93846 (IL).
- (74) Agent: **WEBB, Cynthia**; Webb & Associates, P.O. Box 2189, Rehovot 76121 (IL).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/052274 A2

(54) Title: PRODUCTION OF BACTERIOPHAGE COMPOSITIONS FOR USE IN PHAGE THERAPY

(57) Abstract: The present invention relates to the use of bacteriophages to treat infections diseases. The invention provides a method for intermediate to large scale commercial production of bacteriophage composition, wherein the method reduces the production volume and elevates production yield. The invention further relates to improved bacteriophage compositions comprising specific sugars that reduce or abolish the bacterial phage-neutralizing activity.